

WE CLAIM:

1. Inbred corn seed designated G3001, samples of seed have been deposited in the ATCC accession number X.
2. A corn plant produced by the seed of Claim 1.
3. A tissue culture of regenerable cells of G3001 of Claim 1 wherein the cells of the tissue culture regenerates plants capable of expressing the all of the physiological and morphological characteristics of G3001.
4. A tissue culture of regenerable cells according to Claim 3, the cells or protoplasts of the tissue selected from the group consisting of leaves, pollen, embryos, roots, root tips, meristem, ovule anthers, silk, flowers, kernels, ears, cobs, husks and stalks, and cells and protoplasts thereof.
5. A corn plant capable of expressing all of the physiological and morphological characteristics of G3001 regenerated from the cells of the tissue culture of Claim 3.
6. Hybrid seed produced by the method comprising the following steps:
  - (a) planting, in pollinating proximity, seeds of corn inbred lines G3001 which has been deposited in the ATCC accession number X and another inbred line, one of said inbred lines not releasing pollen;
  - (b) cultivating corn plants resulting from said planting;
  - (c) allowing pollination to occur between said inbred lines; and
  - (d) harvesting seeds produced on the non-pollen releasing inbred.

7. Hybrid seed produced by the method comprising at least one ancestor being the inbred plant designated G3001 in Claim 2 crossing in a hybrid combination with a plant of another inbred line, and producing hybrid seed therefrom.

8. Hybrid plants grown from seed of Claim 7.

9. A first generation (F1) hybrid corn plant produced by using G3001 which has been deposited in the ATCC accession number X the process of:

5 (a) planting, in pollinating proximity, seeds of corn inbred lines G3001 and another inbred line;

5 (b) cultivating corn plants resulting from said planting;

5 (c) preventing pollen production by the plants of one of the inbred lines this being the seed producing plant;

5 (d) allowing natural cross-pollination to occur between said inbred lines;

10 (e) harvesting seeds produced on the seed producing plants of the inbred line of step (c); and

10 (f) growing a harvested seed of step (e).

10. A tissue culture of the regenerable cells of the corn plant of Claim 8.
11. A tissue culture of the regenerable cells of the corn plant of Claim 9.
12. A plant according to Claim 2, including in the plant at least one transgene.
13. A seed according to Claim 1, including at least one transgene.
14. Hybrid seed comprising at least one transgene capable of being identified, said seed produced by hybrid combination of plants of inbred corn seed designated G3001 in Claim 13 and plants of another inbred line.
15. A plant according to Claim 2, including in the plant at least one mutant gene.
16. A seed according to Claim 1, including at least one mutant gene.
17. Hybrid seed comprising at least one mutant gene said seed produced by hybrid combination of plants of inbred corn seed designated G3001 in Claim 16 and plants of another inbred line.
18. A method of identifying the seed according to claim 1, the steps comprising: planting hybrid seed, selecting plants from the planting that appear less robust than the other plants, self-pollinating the selected plant and harvesting the seed therefrom, using the seed and its progeny.